

**AMENDMENTS TO THE CLAIMS**

Please cancel claims 1-5, 7-11, 13-18 and 28-31 without prejudice.

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1-18 (canceled)

Claim 19 (previously presented): A method for modifying a light flux in a microscope including an electrically powered light source having a control device, an illuminating optical system for illuminating a specimen, an aperture device disposed in an illumination beam path of the microscope and a spectral correction device disposed in the illumination beam path, the method comprising:

changing a numerical aperture of the illuminating optical system using the aperture device so as to change a resolution and contrast of the microscope; and

concurrently controlling the control device and the spectral correction device so that, upon a change in the numerical aperture, both a light flux through the illuminating optical system and a spectral intensity distribution of light directed onto the specimen remains substantially unchanged.

Claim 20 (previously presented): The method as recited in claim 19 further comprising:

detecting at least a portion of the light flux passing through the illuminating optical system; and

generating a signal based on the detecting, the signal being usable for at least one of open-loop or closed-loop control of the light source and for correcting a spectral intensity distribution of light emitted by the light source.

Claim 21 (previously presented): The method as recited in claim 19 wherein the controlling is performed by moving the spectral correction device relative to the illumination beam path.

Claim 22 (canceled)

Claim 23 (original): The method as recited in claim 21 wherein the moving of the spectral correction device is performed by at least one of displacing a first filter and rotating a second filter, the second filter including a circular disk.

Claim 24 (previously presented): The method as recited in claim 19 wherein the controlling includes moving the spectral correction device relative to the illumination beam path and further comprising:

providing, as a function of respective settings of the aperture device, respective values of the intensity of the light emitting by the light source and respective working positions of the spectral correction device, and

storing the provided values and working positions in a data storage unit.

Claim 25 (previously presented): The method as in claim 19 further comprising controlling the aperture device using a control computer, and wherein the controlling the control device and the spectral correction device is performed using the control computer.

Claim 26 (canceled)

Claim 27 (previously presented): The method as recited in claim 19 wherein the controlling includes moving the spectral correction device relative to the illumination beam path so as to change the spectral intensity distribution of the light from the light source.

Claim 28-31 (canceled)